



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,291	12/05/2001	Tomoya Ohnishi	35.C16001	4392
5514	7590	02/11/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			ROY, SIKHA	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 02/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

CV

Office Action Summary	Application No.	Applicant(s)	
	10/002,291	OHNISHI, TOMOYA	
	Examiner	Art Unit	
	Sikha Roy	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-27 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1103</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Amendment, filed on November 10, 2003 has been entered and overcomes the rejection of claims 1-26 under 35 U.S.C. § 103(a).

The amended drawings of Figs. 11-13 are approved by the examiner.

This application is in condition for allowance except for the following formal matters:

Drawings

The drawing (Fig. 2) filed on November 10, 2003 is objected to as failing to comply with 37 CFR 1.84(p)(5) because it includes the following reference sign(s) not mentioned in the description. The reference identifiers a – f included in Fig. 2 identifying associated elements are not mentioned in the specification.

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Allowable Subject Matter

Claims 1-27 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

Referring to claim 1, the references of the Prior Art of record fails to teach or suggest an image displaying apparatus with the combination of the limitations as set forth in claim 1, and specifically comprising the limitation of a spacing member provided between the first and second plates including an electrode which is spaced from the anode, contacting or being disposed close to the potential regulating electrode.

Claims 2-5,7-12,17,19,23-27 are allowable for the reasons given in claim 1 because of their dependency status from claim 1.

Regarding claim 6 the prior art of record neither shows nor suggests the image displaying apparatus with all the limitations as claimed particularly the limitation comprising the average height D_a of a portion of the anode contacting the spacing member on outside of the image area with surface roughness R_a , the average height D_b of a portion of the potential regulating electrode contacting the spacing member, with surface roughness R_b satisfying following conditions : $|D_a - D_b| \leq 2R_a$ and $|D_a - D_b| \leq 2R_b$.

Regarding claim 13 the prior art of record neither shows nor suggests the image displaying apparatus with all the limitations as claimed particularly the limitation comprising the interval between the electrodes contacting the anode and the potential

Art Unit: 2879

regulating electrode is substantially same as the interval between the anode and the potential regulating electrode.

Regarding claim 14 the prior art of record neither shows nor suggests the image displaying apparatus with all the limitations as claimed particularly the limitation comprising the interval between a projective position of an extreme point on the anode side of the potential regulating electrode to the spacing member and a position of an extreme point on the anode side of the electrode contacting the potential regulating electrode is ten percent or less of an interval between the potential regulating electrode and the anode.

Regarding claim 15 the prior art of record neither shows nor suggests the image displaying apparatus with all the limitations as claimed particularly the limitation comprising the interval between a projective position of an extreme point on the potential regulating electrode side of the anode to the spacing member and a position of an extreme point on the potential regulating electrode side of the electrode of the spacing member contacting the anode is ten percent or less of an interval between the potential regulating electrode and the anode.

Regarding claims 16 and 21, the prior art of record neither shows nor suggests the image displaying apparatus with all the limitations as claimed particularly the limitation comprising the spacing member contacting a portion between the potential regulating electrode and the anode.

Regarding claim 18 the prior art of record neither shows nor suggests the image displaying apparatus with all the limitations as claimed particularly the limitation

Art Unit: 2879

comprising the average height D_a of a portion of the anode contacting the spacing member on outside of the image area with surface roughness R_a , the average height D_b of a portion of the potential regulating electrode contacting the spacing member, with surface roughness R_b and the averaged height D_c of the structure contacting the spacing member satisfying following conditions : $|D_a - D_c| \leq 2R_a$ and $|D_b - D_c| \leq 2R_b$.

Regarding claim 20 the prior art of record neither shows nor suggests the image displaying apparatus with all the limitations as claimed particularly the limitation comprising the high resistance membrane having a volume resistivity lower than that of the structure is formed on the surface of the structure contacting the spacing member.

Regarding claim 22, the prior art of record neither shows nor suggests the image displaying apparatus with all the limitations as claimed particularly the limitation comprising the structure of the spacing member for contacting the area between the anode and the potential regulating electrode is a projecting configuration.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2879

Contact Information

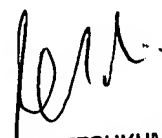
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (703) 308-2826. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (703) 305-4794. The fax phone number for the organization is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

S.R.

Sikha Roy
Patent Examiner
Art Unit 2879



NIMESHKUMAR D. PATEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800